UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,611	10/03/2001	Dwight Poplin	10004192-1	2702

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EXAMINER
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ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 November 2005</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3-8,10,12-16 and 18-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1, 3-8, 10, 12-16 and 18-23</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/29/2005 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments (Amendment pages 3-4) state that since the focus of Shinsky is a CCD video camera and the captured video data, Shinsky is not concerned with exposure times and therefore one of ordinary skill in the art would not have been motivated to combine the Shinsky and Norita references. The Examiner respectfully disagrees. The CCD video camera disclosed by Shinsky is concerned with exposure times. Shinsky discloses an automatic exposure algorithm that generates shutter control values to control the exposure time and AGC control signals in order to adjust the shutter speed to ensure that the proper signal level is output from the camera (col. 8, line 1, - col. 9, line 37).

Applicant's arguments (Amendment page 4) state that only by using impermissible hindsight could one suggest applying the teaching of Norita to image capturing parameters other than exposure time. The Examiner respectfully disagrees.

The Shinsky reference teaches that multiple image capturing parameters such as exposure time, gain value, etc. are varied in accordance with one another and the Norita reference teaches adjusting current settings of image capturing parameters (exposure settings) to conform to an image selected by a user. Therefore, claims 1, 10 and 18 are rendered obvious by the combination of the Shinsky and Norita references. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-8, 10, 12-16, and 18-23 rejected under 35 U.S.C. 103(a) as being

unpatentable over Shinsky et al. US 6,285,398 in view of Nortia et al. US

2004/0169767.

Re claim 18, Shinsky discloses in figure 3 a system including a video camera

capable of transmitting raw video data to a host computer where it is processed and

converted for display (col. 4, lines 6-27). The system provides a method of adjusting

image-capturing parameters of an image-capturing device (100) comprising: capturing a

scene of interest as raw image data using an image sensor (12) of the image-capturing

device (100) (col. 4, lines 30-53); processing the raw image data using first settings of

the image capturing parameters (contrast, brightness, hue, gain, etc.) to produce a first

image of the scene of interest; processing the raw image data using second settings of

the image capturing parameters (contrast, brightness, hue, gain, etc.) to produce a

second image of the scene of interest (col. 5, line 31- col. 8, line 35; col. 9, line 40 – col.

10, line 65) (The host computer (200) processes the raw image data in order to

continually adjust the gain and appropriately adjust the control signals according to input

of a user via a graphical user interface, thus multiple images are produced according to

the updated image capturing parameters); and adjusting current settings of the image

capturing parameters of the image capturing device (100) to conform with one of the

first and second images, the adjusted current settings of the image capturing

parameters being used by the image capturing device (100) to capture a subsequent

image (generated shutter and AGC control signals are provided to the camera (100)

(col. 8, lines 1-15, 55-67)). Although the Shinsky reference discloses all of the above

limitations including a graphical user interface allowing a user view images and to

provide control inputs to adjust current settings (gain value, contrast, brightness, hue,

etc.) of a picture, the reference fails to distinctly state that first and second images

having different image capturing parameters are displayed for user selection and the

current settings of the image capturing parameters are adjusted to conform with one of

the first and second images selected by a user .

Norita discloses in figure 9 a flow chart of the operation of manual exposure

photography of a digital camera. The camera includes an image sensor (9) that

captures a plurality of images at different exposure times by activating after a lapse of

time (Ti) and replacing the previous image signal in a buffer memory (82) with the

current image signal (page 6, paragraphs 115-118). Therefore, a first image and a

second image are captured using different settings of image-capturing parameters

(exposure settings). Each of the images corresponding to a different exposure setting is

displayed on an LCD (51), and when an image with desired exposure is displayed on

the LCD (51) a user selects that image by pressing a release button (30) (page 6,

paragraphs 119-120). Therefore, first and second images corresponding to different

exposure settings are displayed as comparison images for user selection. The

exposure settings of the camera are changed for each exposure time in order to obtain

images of varying exposure (page 6, paragraphs 118-119). Therefore, the current

settings of the image capturing parameters (exposure settings) are adjusted for each

image that is written to the buffer memory (82). If the user presses the release button

(30), the process goes on to step 45 and the exposure is not further changed (page 6,

paragraphs 120-121). Since when the release button is pressed the exposure time is

not further changed (and the exposure time is changed otherwise) the Examiner is

reading this feature as adjusting current settings (corresponding to not changing the

exposure time) of the image-capturing parameters of the image-capturing device.

Therefore, the current settings of the image capturing parameters remain the same

when an image is selected by a user. Thus, the settings conform with the image

selected by the user. As stated above, Norita discloses a method of displaying

comparison images for user selection and subsequently adjusting settings of an image

capturing device according to the user selection. Therefore, it would have been obvious

for one skilled in the art to have been motivated to include the concept of adjusting the

currents settings of image capturing parameters according to a displayed image that is

selected by a user as disclosed by Norita in the method of processing raw image data

by setting image capturing parameters using a graphical user interface as disclosed by

Shinsky. Doing so would provide a means for specifying an image having proper image

capturing parameters while viewing a serially updated image in order to set the image

capturing parameters (Norita: page 7, paragraph 135).

Re claim 19, the image capturing parameters adjusted by the host computer

(200) include contrast, brightness, hue, gamma correction, and white balance (col. 6,

lines 17-35; col. 7, lines 57-60; col. 9, lines 44-48).

Re claim 20, Norita states that the LCD (51) can display images either in

sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first

and second images corresponding to different exposure settings may be simultaneously

displayed.

Re claim 21, Norita states that the LCD (51) can display images either in

sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first

and second images corresponding to different exposure settings may be sequentially

displayed.

Re claim 1, Shinsky discloses in figure 3 a system including a video camera

capable of transmitting raw video data to a host computer where it is processed and

converted for display (col. 4, lines 6-27). The system provides a method of adjusting

image-capturing parameters of an image-capturing device (100) comprising: a first

image and a second image using different settings of image capturing parameters

including: processing raw image data using first settings of the image capturing

parameters (contrast, brightness, hue, gain, etc.) to produce a first image of the scene

of interest; processing the raw image data using second settings of the image capturing

parameters (contrast, brightness, hue, gain, etc.) to produce a second image of the

scene of interest (col. 4, lines 30-53;col. 5, line 31- col. 8, line 35; col. 9, line 40 – col.

10, line 65) (The host computer (200) processes the raw image data in order to

continually adjust the gain and appropriately adjust the control signals according to input

of a user via a graphical user interface, thus multiple images are produced according to the updated image capturing parameters); and adjusting current settings of the image capturing parameters of the image capturing device (100) to conform with one of the first and second images, the adjusted current settings of the image capturing parameters being used by the image capturing device (100) to capture a subsequent image (generated shutter and AGC control signals which conform to the user input via the graphical user interface are provided to the camera (100) (col. 8, lines 1-15, 55-67)). Although the Shinsky reference discloses all of the above limitations including a graphical user interface allowing a user view images and to provide control inputs to adjust current settings (gain value, contrast, brightness, hue, etc.) of a picture, the reference fails to distinctly state that first and second images having different image capturing parameters are displayed for user selection and the current settings of the image capturing parameters are adjusted to conform with one of the first and second images selected by a user .

Norita discloses in figure 9 a flow chart of the operation of manual exposure photography of a digital camera. The camera includes an image sensor (9) that captures a plurality of images at different exposure times by activating after a lapse of time (Ti) and replacing the previous image signal in a buffer memory (82) with the current image signal (page 6, paragraphs 115-118). Therefore, a first image and a second image are captured using different settings of image-capturing parameters (exposure settings). Each of the images corresponding to a different exposure setting is displayed on an LCD (51), and when an image with desired exposure is displayed on

the LCD (51) a user selects that image by pressing a release button (30) (page 6,

paragraphs 119-120). Therefore, first and second images corresponding to different

exposure settings are displayed as comparison images for user selection. The

exposure settings of the camera are changed for each exposure time in order to obtain

images of varying exposure (page 6, paragraphs 118-119). Therefore, the current

settings of the image capturing parameters (exposure settings) are adjusted for each

image that is written to the buffer memory (82). If the user presses the release button

(30), the process goes on to step 45 and the exposure is not further changed (page 6,

paragraphs 120-121). Since when the release button is pressed the exposure time is

not further changed (and the exposure time is changed otherwise) the Examiner is

reading this feature as adjusting current settings (corresponding to not changing the

exposure time) of the image-capturing parameters of the image-capturing device.

Therefore, the current settings of the image capturing parameters remain the same

when an image is selected by a user. Thus, the settings conform with the image

selected by the user. As stated above, Norita discloses a method of displaying

comparison images for user selection and subsequently adjusting settings of an image

capturing device according to the user selection. Therefore, it would have been obvious

for one skilled in the art to have been motivated to include the concept of adjusting the

currents settings of image capturing parameters according to a displayed image that is

selected by a user as disclosed by Norita in the method of processing raw image data

by setting image capturing parameters using a graphical user interface as disclosed by

Shinsky. Doing so would provide a means for specifying an image having proper image

capturing parameters while viewing a serially updated image in order to set the image

capturing parameters (Norita: page 7, paragraph 135).

Re claim 3, the step of capturing first and second images includes sequentially

capturing a scene of interest using two different settings of a selected image capturing

parameter to capture the first and second images (an automatic exposure algorithm is

performed in order to generate shutter and AGC control signals to ensure that the

proper signal level is output from the camera (100). The automatic exposure algorithm

is operated continuously in order to produce updated control signals at intervals of every

ten frames (col. 8, liens 1-15).

Re claim 4, the image capturing parameters adjusted by the host computer (200)

include contrast, brightness, hue, gamma correction, exposure period, and white

balance (col. 6, lines 17-35; col. 7, lines 57-60; col. 8, lines 1-15; col. 9, lines 44-48).

Re claim 5, see claim 4.

Re claim 6, Norita states that the LCD (51) can display images either in

sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first

and second images corresponding to different exposure settings may be simultaneously

displayed.

Re claim 7, Norita states that the LCD (51) can display images either in sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first and second images corresponding to different exposure settings may be sequentially displayed.

Re claim 8, a subsequent (third) image is captured using the current settings (calculated shutter, AGC, and gain adjustment values) of the image capturing parameters to produce the third image (col. 8, line 57 – co. 9, line 37).

Re claim 22, the image capturing parameters adjusted by the host computer (200) include contrast, brightness, hue, gamma correction, and white balance (col. 6, lines 17-35; col. 7, lines 57-60; col. 9, lines 44-48).

Re claim 10, see claim 1.

Re claim 12, see claim 3.

Re claim 13, see claim 4.

Re claim 14, see claim 5.

Re claim 15, see claim 6.

Re claim 16, see claim 7.

Re claim 23, the image capturing parameters adjusted by the host computer

(200) include contrast, brightness, hue, gamma correction, and white balance (col. 6,

lines 17-35; col. 7, lines 57-60; col. 9, lines 44-48).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

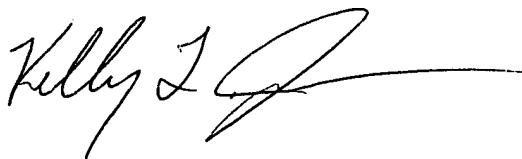than SIX MONTHS from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ

TUAN HO
PRIMARY EXAMINER